

EXHIBIT 9

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SAMSUNG ELECTRONICS CO. LTD., SAMSUNG ELECTRONICS
AMERICA, INC., AND APPLE, INC.,
Petitioner,

v.

NEONODE SMARTPHONE LLC,
Patent Owner.

Case IPR2021-00144
Patent 8,095,879

PATENT OWNER'S SUR-REPLY

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I. SECONDARY CONSIDERATIONS STRONGLY SUPPORT A FINDING OF NONOBVIOUSNESS.

Petitioner fails to meaningfully challenge Neonode’s showing that Neonode’s innovative, swipe-based user interface was effusively-praised by industry observers, academia and the users. POR, 3-17. Tellingly, Samsung’s representatives presciently referred to Neonode’s swiping user interface as “the future of mobile phones” and recognized “we need this” before licensing the ’879’s application. POR, 11-12; Ex. 2026 [Bystedt-Decl.] ¶9. Praise and licensing of this sort is hen’s teeth rare, particularly when it comes from a sophisticated party who now, 20 years after the fact, claims the inventions were obvious.

Contrary to Petitioner’s claim of a lack of nexus (Reply, 30), the praise is specifically directed towards the swiping interface captured by the “gliding ... away” limitation lying at the heart of the claims. *See, e.g.*, Ex. 2008 (touting swipe gestures); Ex. 2012, 2-3 (“Swipe, swipe, swipe”); Ex. 2021, 2 (praising “intuitive passage of the finger over the screen”); Ex. 2013, 1 (“if the iPhone’s swipes and taps seem futuristic, they are not,” referencing the Neonode’s previously-developed interface); Ex. 2020, 8 (Neonode was “the first mobile to use swipe gestures”).

Petitioner claims that “[n]either Neonode’s response nor its cited declarations analyze the Neonode devices on a limitation-by-limitation basis.” Reply, 29. This is incorrect. Mr. Shain and Dr. Rosenberg explained how the

N1/N2 phones practiced each element of claim 1. Ex. 2023 [Shain-Decl.] ¶¶4-6; Ex. 2007 [Rosenberg-2nd-Decl.] ¶¶40-41. The POR, moreover, explained how Neonode’s N1/N2 practiced the claims and how the praise corresponded to the core “gliding ... away” limitation. POR, 5-17.

The only limitation Petitioner contends was not shown is the “representation of the function is not relocated or duplicated during the gliding.” Reply, 30-31. This too is incorrect. Mr. Shain testified that “[b]oth the Neonode N1 and N2 presented three icons in a strip along the lower edge of the display” and that “[n]one of the icons were relocated or duplicated during the swiping gesture.” Ex. 2023 [Shain-Decl.] ¶6; Ex. 1057 [Goertz] 151:20-152:7 (N1 and N2 each have three printed icons). These icons are readily visible:

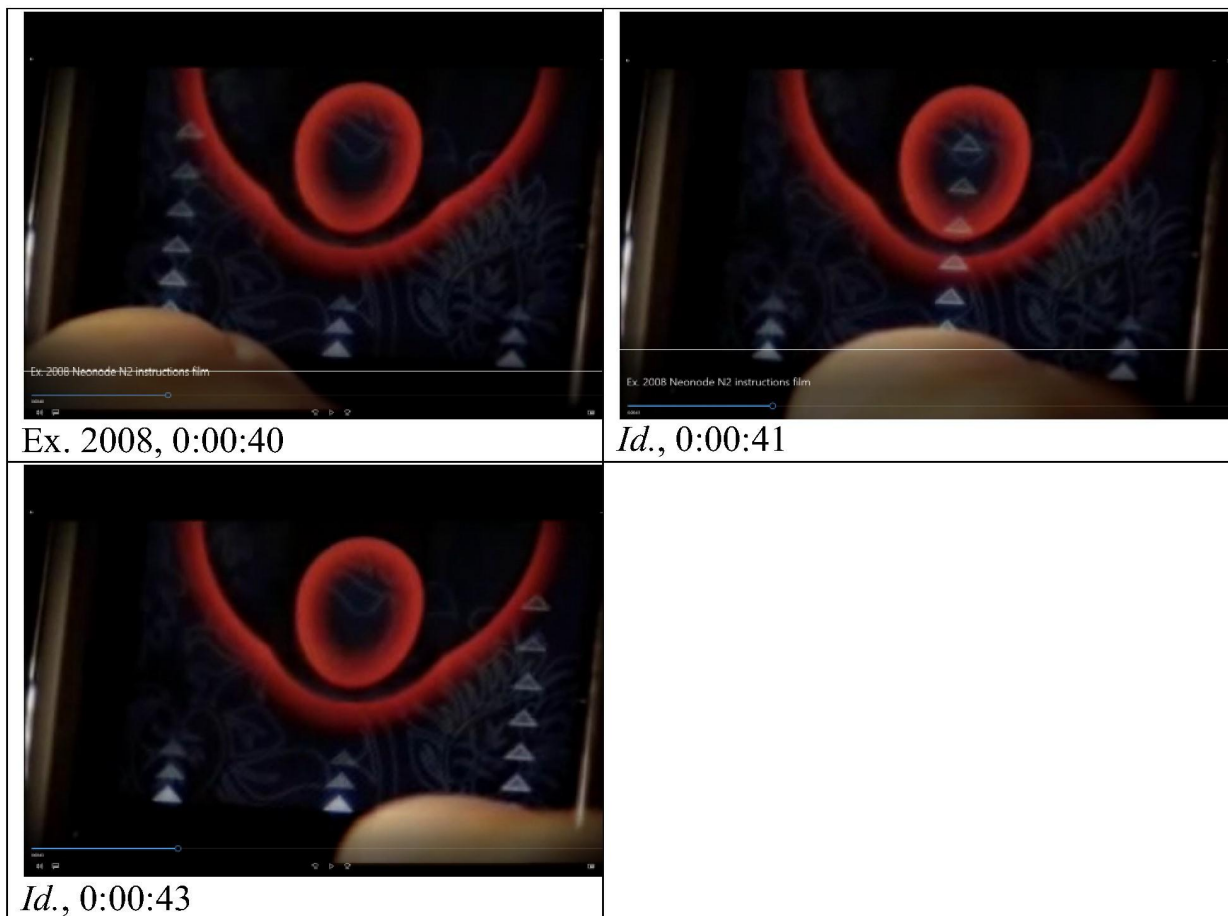


Ex. 2018 [PhD-Dissertation] 9; Ex. 2020 [Hollatz-Dissertation] 8.

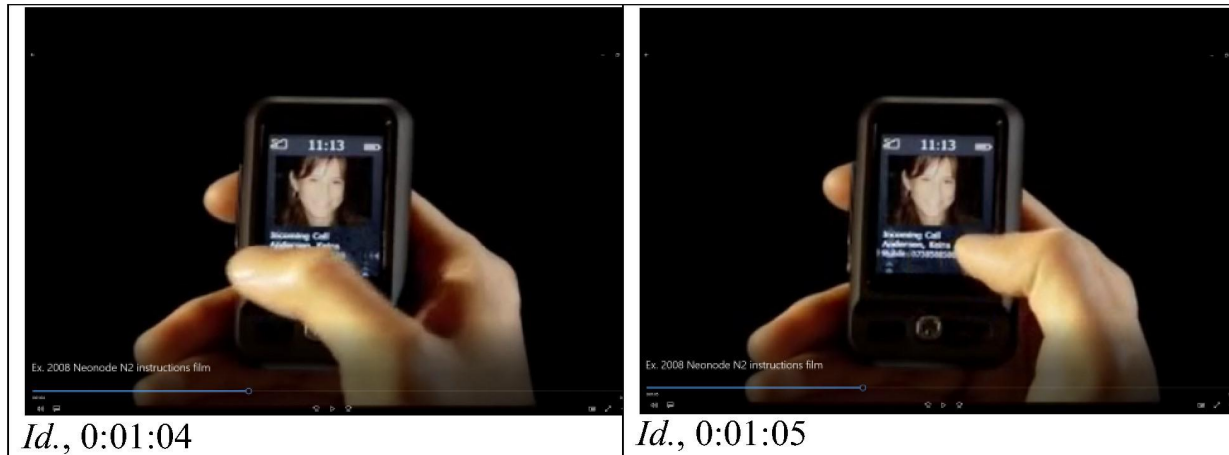
Petitioner incorrectly contends that the icons cannot meet the claims because they are “printed” on the device. Reply, 31. But claim 1 only requires that the

representation of a function “is provided,” and does not preclude printed icons. It is undisputed that the printed icons are not relocated or duplicated during swiping.

Even if the printed icons were to be ignored, the arrows, contrary to Petitioner’s contention, likewise are not “duplicate[d] *during* the gliding motion.” Reply, 31. The video provided to the Examiner confirms that additional arrows appear upon touching without regard to whether a swipe later occurs. Ex. 2008 [N2-Advertisement-Video] 0:00:15, 0:00:25-26, 0:00:34-35.



The arrows, like lights on a runway, are meant to show a potential pathway for swiping. Indeed, the additional arrows may appear in a direction orthogonal to the ensuing sweep, further indicating the arrows are not duplicated *during* the sweep. For instance, at 0:01:03-1:05, the arrows multiply vertically upon a touch despite a later horizontal swipe:



Petitioner alleges that Samsung’s praise of Neonode’s phones is “hearsay” (Reply, 32), but party admissions are not “hearsay” particularly when proffered to show state of mind. *See* FED. R. EVID. §§ 801(d)(2), 803(3). Moreover, Petitioner does not deny that its representatives praised Neonode’s user interface, much less proffer testimony of its own to contradict Mr. Bystedt’s account. Even if Samsung’s executives had a sidebar in Korean, it does not change what they said to Mr. Bystedt or the fact that they licensed Neonode’s technology soon thereafter. Ex. 1058 [Eriksson-Depo.] 75:25-76:2. Petitioner’s contemporaneous words and actions belie their 20-year-later attorney arguments.

Petitioner attempts to downplay its own licensing of the '879's application [REDACTED], arguing that "Neonode has not shown the agreement, which covers multiple patent applications and other technology, is the direct result of the unique characteristics of the claimed invention, as opposed to the other licensed technology, such as zForce." Reply, 33. But this was not a license to a bundled product or hundreds of applications. Rather, the license concerned *two* specifically identified applications, the zForce application (concerning the light beam controlled touch-screen) and the '879's application (concerning the software for interaction with the operating system). Ex. 2028 [Samsung-Agreement] 1-2. Moreover, the '879 application itself was specifically named "Neno" (*id.*) which was specifically referenced in the Background of the agreement:

The [Neonode] mobile handsets are based on the light beam controlled touch-screen, "zForce", *and software for interaction with the operating system of the device, "Neno"*. Neonode is in possession of technology, - including zForce *and Neno* – intellectual property rights and know-how for development of mobile handsets (the "'Neonode IPR").

Ex. 2028, 2; *id.* ("Neonode Licensed Technology" included rights to the '879 application and Neno). Samsung was clearly interested in both zForce and Neno and, indeed, licensed Neonode's technology exclusively. *Id.*, 4. Nor was the agreement prompted by a threat of litigation, a prior business relationship or other

economic reason that might discount Samsung’s undeniable interest in exclusively licensing the technology. Indeed, the agreement was for a joint product development program because Samsung saw Neonode’s technology as the “future of mobile phones” and recognized “we need this.” Tellingly, Petitioner provides no testimony or other evidence concerning its own motivation.

Petitioner also incorrectly contends that Goertz “admitted the claimed gesture-based interface was not new.” Reply, 32. Wrong. Goertz merely stated a palm pilot used a stylus-based sliding for “making a reverse texting” (Ex. 1057 [Goertz] 37:2-13) and other devices had a touch-based system (18:7-17). Goertz did not suggest the patented inventions were not “new.” Petitioner also contends the 2002 CeBIT demonstration should be disregarded because the device allegedly did not have a working touch interface. Petitioner disregards the witness’s testimony that the prototype had “a display” and “a moving video showing different things you could do with the device.” Ex. 1058 [Eriksson] 105:15-18, 107:3-6 (Neonode’s development of sweeping/swiping/gliding interface started before CeBIT).

II. PETITIONER FAILS TO SHOW ACTIVATION BY “GLIDING ... AWAY” (ALL CLAIMS).

The claims require “activating [a] function” via an operation wherein “the object glid[es] along the touch sensitive area away from the touched location.” Ex. 1001 [’879] cl. 1. Hirayama-307, however, discloses a “dragging” motion, not a

“gliding” motion. Petitioner contends that “gliding ... away” encompasses a “drag-and-drop” and, indeed, any movement away from the represented function. Petitioner’s position is contrary to the plain meaning and the intrinsic record. *See* Section II.A. Petitioner’s alternative position that Hirayama-307 does not disclose a “drag-and-drop” also fails. *See* Section II.B.

A. The Plain Meaning And The Intrinsic Record Confirm That “Gliding ... Away” Is Distinct From A Drag-And-Drop.

1. The Plain Meaning Confirms “Gliding” And “Dragging” Are Distinct.

Petitioner relies solely on Hirayama-307 to show “gliding ... away” (Pet., 58-59), but Hirayama-307 does not disclose a glide/swipe. Instead, Hirayama-307 makes clear, *at least 14 times*, that its movement is a **dragging** movement. Ex. 1006 [Hirayama-307] 5:3-12 (pen “moves (*i.e., drags*)” on the screen); Abstract (“If the user touches an icon ... with a point of the pen and **drags the pen** ... if the user touches the window with the point of the pen and **drags** the pen ...”); 1:52-55 (“it is an object of the present invention ... in which the user can activate ... a designated function ... when the user **drags** a pen.”); 1:56-59 (“It is another object of the present invention ... in which a starting or ending position of a **dragging operation** can be designated ...”); 6:10-11, 6:27-29, 7:9-24, cls. 1, 3, 5; POR, 26-30. Indeed, Hirayama-307 makes clear that a “user can activate or deactivate the

designated function **only by dragging** the pen 3.” *Id.*, 7:9-10. That is, a drag is required and a glide/swipe will not do..

“Dragging,” *e.g.*, a sack of bricks, is not “gliding,” *e.g.*, a figure skater.



“Dragging” and “gliding” are near opposites and connote entirely different movements. Notably, Petitioner does not address the plain meaning, nor explain why a “**dragging**” movement would be a “gliding” movement. Tellingly, Petitioner’s expert has not performed **any** analysis on the difference between the plain meaning of “gliding” and “dragging”:

Q. What is the difference between the plain meaning of gliding a pen as opposed to dragging a pen?

A. I don’t recall performing an analysis distinguishing between any possible difference in the meanings of the terms “gliding” and “dragging” in my reports.

Ex. 2044 [Bederson-2nd-Depo.] 25:10-17; 24:5-18 (refusing to explain understanding of “gliding”); 33:3-25; 34:2-9.

Because Petitioner and its expert have not demonstrated that a “drag” is “gliding ... away,” Petitioner fails to prove *any* of the claims are obvious under the plain meaning.

2. The Applicant Disclaimed “Drag-and-Drop.”

This conclusion is confirmed by the prosecution history. The Applicant made *expressly* clear that “gliding ... away” is distinct from a “drag-and-drop operation”:

Hoshino does not teach gliding a finger away from an icon. Instead, Hoshino teaches a drag-and-drop operation for moving an icon.

Ex. 1003 [Prosecution-History] 171; POR, §III.A.1.

Some distinctions between claimed invention and Hoshino		
	Claimed invention	Hoshino
Objective	Novel touch-and-glide user interface operation	Discriminate between two conventional operations; namely, (1) touch, and (2) drag-and-drop

Ex. 1003, 170. These clear statements operate as a prosecution disclaimer that the claimed “gliding ... away” limitation does not encompass “drag-and-drop” operations. POR, 21-23 (citing cases). Notably, Petitioner does not distinguish Patent Owner’s cases. Petitioner only cites *Omega Eng’g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) which provides that an ambiguous statement does not operate as a disclaimer. *See* Reply, 8. But the Applicant’s clear statements above are not ambiguous.

Petitioner and its expert wholly ignored this prosecution history. Pet., 58-60. Its expert did not conduct any analysis of drag-and-drop. POR, 31-33. The Reply’s untimely arguments concerning the prosecution history fail. Petitioner contends that Neonode misrepresents Hoshino’s disclosure and applicant’s related arguments (Reply, 6), but this is false. First, Petitioner’s general arguments about the precise nature of the difference between Hoshino and the claims are irrelevant. The Federal Circuit has rejected the proposition “that prosecution disclaimer applies only when applicants attempt to overcome a claim rejection.” *Uship Intellectual Props., LLC v. United States*, 714 F.3d 1311, 1315 (Fed. Cir. 2013). Next, Petitioner cites the Examiner’s rejection over Hoshino (Ex. 1003 [Prosecution-History] 179-180), but that was before the Applicant distinguished the claimed gliding from Hoshino’s “drag-and-drop” operation. Petitioner also cites the Applicant’s discussion of Hoshino’s “push-in operation” and its “drag operation” but there, the Applicant merely made clear that neither of Hoshino’s operations satisfied the claims (*id.*, 170). As to the table distinguishing the claimed “novel touch-and-glide” from Hoshino’s “conventional ... drag-and-drop”, Petitioner claims that the “primary” distinction is activation in response to a “hard touch” (Reply, 7), ignoring that this distinction is listed last.

Petitioner makes three arguments of questionable relevance concerning the Applicant’s statement:

Hoshino does not teach gliding a finger away from an icon. Instead, Hoshino teaches a drag-and-drop operation for moving an icon. In

Ex. 1003 [Prosecution-History] 171. Petitioner first imagines a distinction between “gliding ... away from an icon” and the limitation “gliding ... away from the touched location.” But the pending claim language at the time was in fact gliding away “from the touched location,” and not “gliding away from an icon.” *Id.*, 164. Furthermore, the touched location is “where the representation [*e.g.*, an icon] is provided” so this is a distinction without a difference. Petitioner next emphasizes the “moving an icon” portion of the phrase “a drag-and-drop operation for moving an icon” ignoring that the Applicant clearly distinguished “gliding ... away” from “drag-and-drop.” If the only distinction were that the icon is moved, there was no need to mention, and underline, that Hoshino’s is a “drag-and-drop operation.” And in any event, Hirayama-307 involves the icon being moved. *See* Section III. Finally, Petitioner contends that the Applicant was arguing against a combination of Hoshino with Nakajima but that does not alter the clear distinction made between the inventive “gliding ... away” and a “drag-and-drop” operation.

The Reply, 9 also argues that “[t]he claim amendments ... do not amount to disclaimer.” But the disclaimer arises from the Applicant’s statements. In accord, the claim amendments confirm that not all “movements” are “gliding ... away.” *See* Section II.B.3. The Reply, 9 further argues that amending the claims to require

“the representation of the function is not relocated or duplicated during the gliding” suggests a drag-and-drop is encompassed by “gliding.” To the contrary, this limitation reinforces that a drag-and-drop is excluded.

3. Petitioner’s Position That Any Movement Constitutes “Gliding” Is Unsubstantiated And Contrary To The Intrinsic Record.

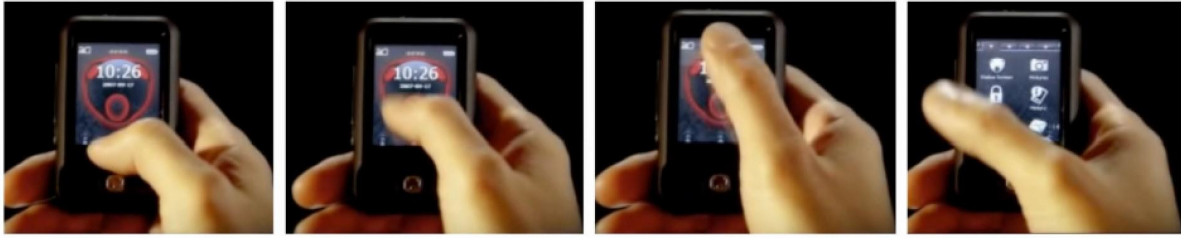
Petitioner’s argument that Hirayama-307 discloses “gliding ... away” is based on the premise that “gliding ... away” is satisfied by any movement away from the represented function. Reply, 3 (“*regardless of whether Hirayama-307’s icon 41 is dragged ... the pen still moves away ...*”); 19 (“Hirayama-307 similarly describes: the user touches the pen down [and] *moves the pen to the display area ...*”); 16 (referring to a “drag/glide *movement*.”). Petitioner does not explain how any movement—let alone Hirayama-307’s “dragging”—could be “gliding,” and Petitioner’s position is contrary to the plain meaning and the prosecution history.

In prosecution, the limitation originally read:

moving in a direction *from* a starting point that is the representation [of a function] ... *to* said display area.

Ex. 1003 [Prosecution-History] 326. In further prosecution after the claims were rejected, the Applicant “encouraged” the Examiner to “watch the video demonstration of the N2 mobile phone/personal digital assistance device” “prior to reviewing Applicant’s arguments.” Ex. 2035 [2008-03-14 Office-Action-

Response] 15-16; Ex. 2008 [N2-Advertisement-Video]. As the video shows, the “gliding ... away” gesture is a seamless “swiping” gesture:



Ex. 2008 [N2-Advertisement-Video] (00:26-00:27).

The Examiner acknowledged the “swiping” gesture, but determined that the “moving ... from ... to” language was too broad to so limit the claims:

The Examiner reviewed the demonstration as encouraged by the Applicant. *In light of the video demonstration, the Examiner can now see the difference between the prior art of record and the present application.* With that being said the Examiner feels that the limitations, as claimed, were reasonably interpreted and the current limitations are still too broad to suggest without research what was shown in the video demonstration.

Ex. 2045 [Final-Office-Action] 16.¹

¹ Petitioner purported to include the file history (Ex. 1003) but omitted material office actions, including ones directly contrary to its arguments, such as Exhibit 2045. To the extent Petitioner objects to the filing of Exhibit 2045, the

In response and following an Examiner-interview, the Applicant amended the claim from “*moving* in a direction *from* a starting point ... *to* said display area” to “*gliding* along the touch sensitive area *away* from the location.” Ex. 1003 [Prosecution-History] 326-327, 343 (amendment “to properly claim the present invention.”). The Applicant repeatedly emphasized that the claimed “gliding ... away” is not just any movement but a “gliding” or “swiping” gesture. *Id.*, 357, 269.

While Petitioner’s position depends upon any type of movement being a “glide,” Petitioner did not substantiate this position under the plain meaning. Dr. Bederson, did not perform any “analysis of any potential distinction between the term gliding a pen and moving a pen in any of my reports, so that’s not an opinion I have.” Ex. 2044 [Bederson-2nd-Depo.] 25:25-26:8; *see also id.*, 33:3-25; 34:2-9 (no analysis of a swipe gesture vis-à-vis a drag-and-drop).

Board should take official notice of the omitted office action. *Merial Limited v. Virbac*, IPR2014-01279, Paper 13, 13-14 (Jan. 22, 2015) (taking notice of European patent application even though neither party had made it of record); *Ericsson Inc. v. Intellectual Ventures II LLC*, IPR2014-00919, Paper 37, 16 n.10 (PTAB, Dec. 7, 2015) (same).

Petitioner contends a drag-and-drop operation discloses “gliding away” because “[t]he claimed ‘gliding ... away’ focuses on how and where a pen/finger interacts with the touch sensitive area, whereas ‘drag-and-drop’ is about how the system reacts to that interaction.” Reply, 2. This is incorrect. First, it relies on the unsupported assumption that Hirayama-307’s drag-and-drop operation discloses the claimed “gliding ... away” simply because the user “moves (*i.e.* drags) the point of the pen.” Ex. 1006 [Hirayama-307] 5:3-12. Second, a drag-and-drop operation “refer[s] *to a combination of a user action and a system response*” Ex. 2005 [Bederson-Depo.] 140:25-141:12.

B. Petitioner’s Argument That Hirayama-307’s Operation Is Not Drag-And-Drop Is Incorrect.

Petitioner also argues that Hirayama-307’s operation is not a drag-and-drop. Reply, 11-12, 18-20.² This is absurd. As discussed in Section II.A.1, Hirayama-307 makes repeatedly clear that its motion is a “dragging” motion, often referring to a “dragging operation.” Ex. 1006 [Hirayama-307] 1:56-59; 7:22-24. Hirayama-307 is not just a “dragging operation,” it is one in which an icon is moved (and enlarged or reduced) from one location to a *specific* location chosen by the user.

² Regardless of whether Hirayama-307’s operation is a drag-and-drop, its moving/dragging of the pen is not shown to disclose “gliding ... away” under its plain meaning. *See* Section II.A.1, 3.

Id., 1:56-59 (“starting or ending position ... can be designated ...”); 1:60-63 (“a position of a window, *i.e.*, a position of an enlarged icon, can be determined with ease.”). Hirayama-307, thus, in its own clear terms, is a “dragging operation” in which an icon is dropped at a specific, user-chosen, location. What is more, Hirayama-307 makes clear that the icon displayed is shown as being moved during the “drag-and-drop.” *Id.*, 2:5-8 (“***the icon display coordinate position is moved*** in accordance with the movement of the position coordinate of the point of the pen.”). Hirayama-307 is a quintessential “drag-and-drop.”

Petitioner’s arguments to the contrary fly in the face of Hirayama-307’s clear teachings. Petitioner contends that a “drag-and-drop” must display an icon being visibly moved, further contending that Hirayama-307’s icon is not shown to be moved. Reply, 10, 12. This is entirely contrary to Hirayama-307 which makes clear the “icon ***display coordinate position is moved***” with the pen’s movement. Ex. 1006 [Hirayama-307] 2:6-8; Section III.A, *infra*. But even if, *arguendo*, Hirayama-307’s icon were not visibly dragged, that too would be immaterial because a drag-and-drop operation does not require a specific visual feedback. Ex. 2007 [Rosenberg-2nd-Decl.] ¶¶59, 61. So long as the object is logically dragged and dropped where the finger/stylus leaves the screen, the operation is a classic drag-and-drop. *Id.* Indeed, Petitioner elsewhere argues a drag-and-drop operation

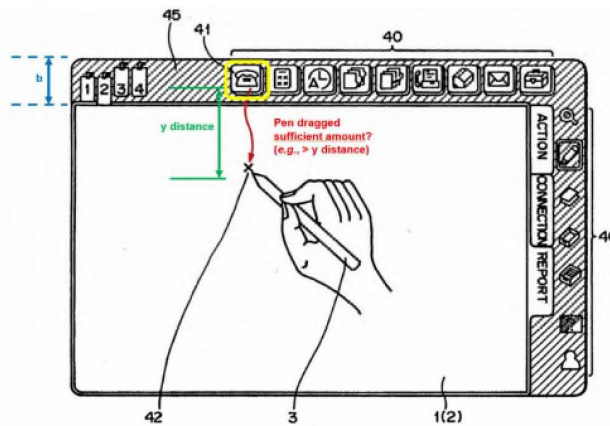
may occur without visually duplicating or relocating the dragged icon. *See* Reply, 22-25.

To avoid the inevitable conclusion that Hirayama-307 is a “drag-and-drop,” Petitioner pretends not to understand (Reply, 4) what it means for “some form of an object” to be logically dragged or “behave[] as if it is being logically dragged.” But such a phenomenon is familiar to even casual computer users. Ex. 2007 [Rosenberg-2nd-Decl.] ¶¶60-61 (providing familiar examples). And, despite Petitioner’s alleged confusion, it cannot undo Hirayama-307’s clear description of its “dragging” movement and “dragging operation.”

Petitioner proceeds from alleged confusion to minutiae, arguing a drag-and-drop operation must “include specific programming of the underlying system to define items as a source/selection objects, and target/destination objects that receive the source via the ‘drop.’” Reply, 5. Such newfound requirements cannot erase Hirayama-307’s unmistakable characterization of its “dragging” movement and operation, and Petitioner does not explain why a “drag-and-drop” is defined by a particular source code implementation. *Contra* Ex. 2007 [Rosenberg-2nd-Decl.] ¶¶60-61, 67. In any event, Hirayama-307 includes even these alleged prerequisites. Hirayama-307’s “source/selection object” is its icon, its specific target is the user-specified location there the enlarged icon is dropped. POR, 26-

28; Ex. 2005 [Bederson-Depo.] 141:10-12 (“for example, you **drop** an icon onto the screen.”).

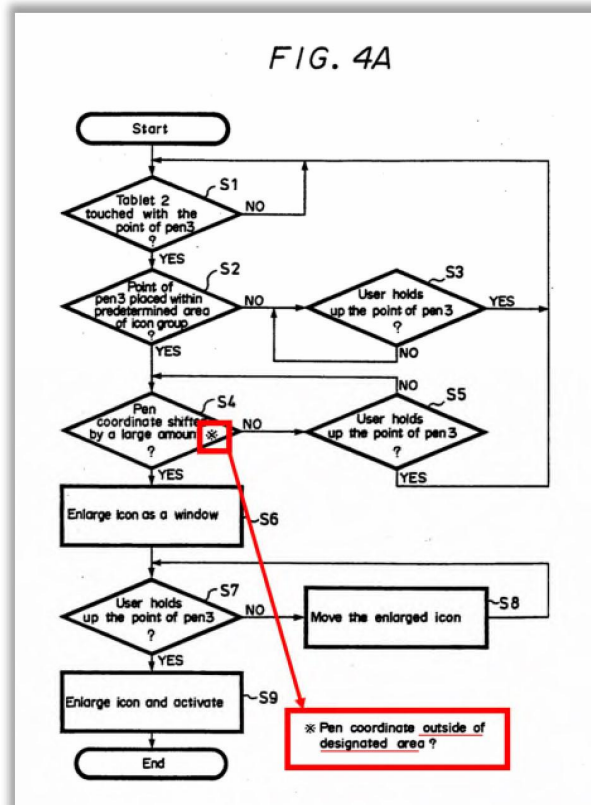
Petitioner relies on Hirayama-307’s Fig. 4A, arguing that Hirayama-307’s icons are not activated by a drag-and-drop, but by a simple moving gesture larger than a pre-defined distance. Reply, 9-10, 13-14, 18-20. The Reply, 14 also presents an incorrect annotation of Hirayama-307’s Fig. 3A to suggest that implementation of Hirayama-307’s Fig. 4 activates an icon by a long swipe:



EX1006, FIG. 3A (annotated)

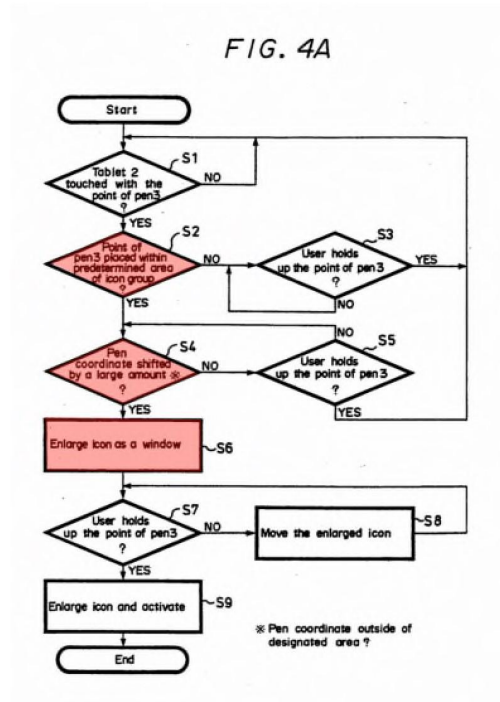
But Hirayama-307 has nothing to do with swiping or gliding. It refers to its motion as a “dragging” motion/operation 14 times and never once as a “gliding” or “swiping” motion. Hirayama-307 can “only” “activate” or “deactivate” an icon by “dragging the pen,” in a classic drag-and-drop fashion. Ex. 1006 [Hirayama-307] 7:9-10; POR, 35-45; Section III.A. Nor is the fact that Hirayama-307 may implement a drag-and-drop, in part, by measuring the distance of movement of the pen of any relevance. Hirayama-307 explains that determining the distance of

movement of the pen is merely an alternative way for determining whether “the pen coordinate is outside of the predetermined designated area (e.g., the hatched area in this embodiment).” Ex. 1006 [Hirayama-307] 5:61-63; *accord* Ex. 1051 [Bederson-Reply-Decl.] 44-45 n. 2 (“A POSA would most likely program the minimum y shift amount to be calculated at the time the pen touches the icon as the distance between the point touched within the icon and the bottom of the hatched area.”); Ex. 2007 [Rosenberg-2nd-Decl.] 23 n.1. Fig. 4A itself confirms the same:

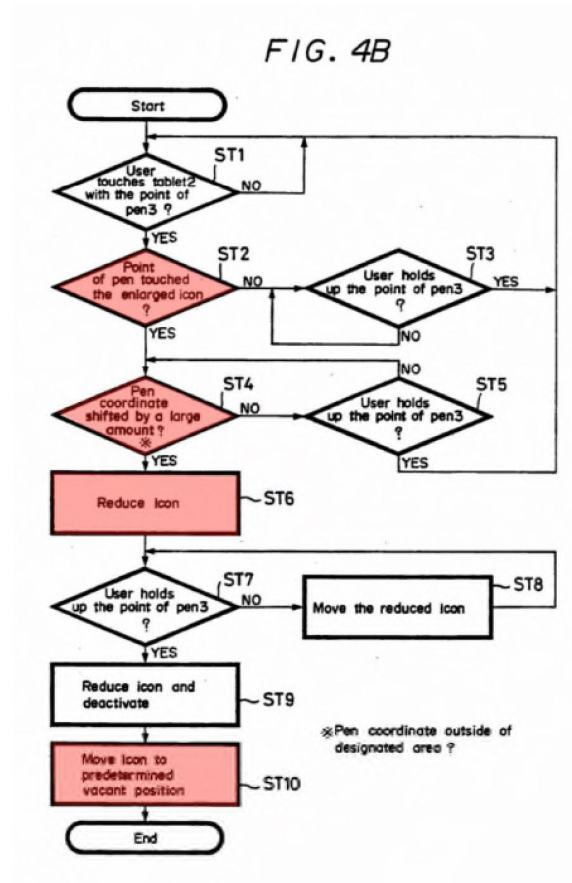


Hirayama-307’s Figure 4A is consistent with the balance of Hirayama-307’s disclosure. In step 2 (S2), the pen is placed within the “predetermined area of [an] icon group.” Thereafter, the pen shifts, *i.e.*, is “dragged,” by a “large amount”

(S4), so the pen is outside of the designated area, after which the dragged icon (5:65-66) is “enlarged ... as a window” (S6).



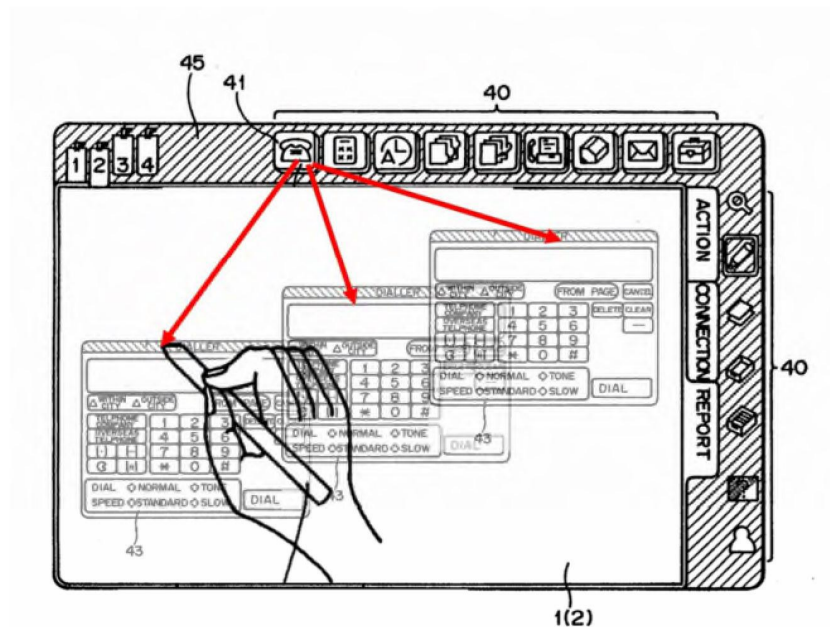
The same process works in reverse as shown in Figure 4B, where the pen touches the enlarged icon (ST2), and once the pen and the enlarged icon are dragged by a large amount (ST4) it is reduced (ST6) and moved to the “predetermined vacant position” (ST10):



Thus, Hirayama-307's Figures 4A-B are entirely consistent with Hirayama-307 being a "drag-and-drop" operation wherein the icon is selected with a pen and dragged outside of the designated area, after which the icon is enlarged as a window with a similar process occurring in reverse. **Nothing** in Figures 4A-B suggests the icon is moved/activated based upon a gliding motion, particularly when Hirayama-307 confirms, **14 times**, that it is a "dragging" motion/operation.

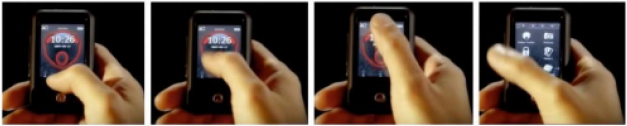
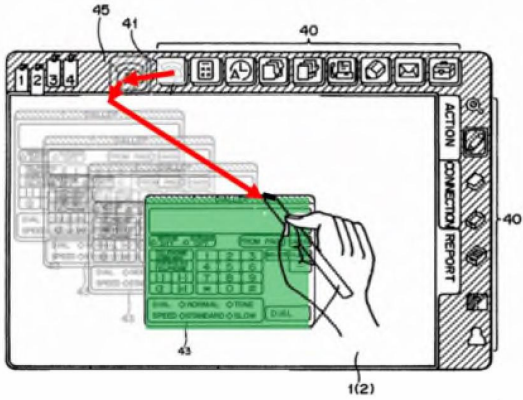
Petitioner's attempt to analogize Hirayama-307 to Neonode's phones/specification is preposterous and belied by secondary considerations. Neonode's effortless swipe-based user interface was a massive improvement over

the drag-and-drop interfaces like Hirayama-307. Attempting to characterize Hirayama-307 as a swipe, Petitioner claims that Hirayama-307's drag-and-drop does not determine "whether a target object is contacted," but instead, at the end of the dragging of the pen, "the same event occurs." Reply, 19. That is incorrect. Hirayama-307 can "only" activate a function via a "drag" to the particular location within the non-hatched area where the user wishes to place the enlarged window, not a swipe/glide. Ex. 1006 [Hirayama-307] 7:9-10. Moreover, "the same event" does not occur in Hirayama-307 regardless of the characteristics of the drag, but the user specifically dictates by dragging and lifting the pen where the enlarged icon is placed:



Relatedly, the Reply, 20 also claims Hirayama-307's drag-and-drop operation is "indistinguishable" from Neonode's claimed invention. Not so. The

claims activate a function by “gliding,” not “dragging” the icon to a chosen location.

Neonode’s Swipe Gesture	Hirayama-307’s Drag-And-Drop
 <p>Ex. 2008 [N2-Advertisement-Video] (00:26-00:27).</p>	 <p>Ex. 2007 [Rosenberg-2nd-Dec1.] ¶¶71-72.</p>

III. PETITIONER’S GROUNDS FAIL TO DISCLOSE OR RENDER OBVIOUS “WHEREIN THE REPRESENTATION OF THE FUNCTION IS NOT RELOCATED OR DUPLICATED” (ALL CLAIMS).

The POR (at 34-60) explained why Petitioner’s grounds fail to disclose “wherein the representation of [a] function is not relocated or duplicated.” The Reply fails to rebut any of Patent Owner’s arguments.

A. Petitioner’s Belated Claim That Hirayama-307 Discloses No Duplication Or Relocation Contradicts Hirayama-307’s Express Disclosure.

As the POR (at 35-46) explained, Hirayama-307 expressly states that the dialer icon 41 is “relocated or duplicated” during the drag-and-drop operation. Ex.

1006 [Hirayama-307] 2:5-8. Hirayama-307 repeatedly states that its icon is “enlarged” during the dragging operation, confirming the icon is moved with the pen prior to being enlarged. *Id.*, 5:39-40, 5:64-66, 7:14-15, 2:10-11. Hirayama-307 provides that an open window is dragged back “to *the* predetermined *vacant* position,” confirming that the original icon was moved during the prior drag-and-drop operation to open the window. *Id.*, 7:3-6; Fig. 4B. Notably, Hirayama-307’s text contains no disclosure that contradicts Patent Owner’s understanding.

In response, Petitioner inexplicably argues that Hirayama-307’s express statement that the icon is moved (*id.*, 2:5-9), in the summary of the invention, is somehow a distinct embodiment from that described in the “Detailed Description,” which supposedly discloses a different embodiment that does not relocate or duplicate the icon. First, Petitioner does not explain why Hirayama-307’s summary *of the invention* would disclose a different system than its detailed description *of the invention*. Second, Hirayama-307’s reference to “a first aspect of the present invention” is not to different embodiments where the icon may or may not be relocated/duplicated with the movement of the pen. Rather, Hirayama-307 presents only one embodiment to open an icon, as discussed above. The “second aspect of the present invention” in Hirayama-307 relates to the reverse operation of moving and closing an already open window, which also relocates/duplicates the window during the drag. *Id.*, 2:14-33. Finally, the Reply

ignores that Hirayama-307's other disclosures confirm that its icon is relocated/duplicated during its dragging operation.

Petitioner also relies upon Figures 3A-B, arguing that 3A does not show icon 41 being duplicated or relocated. But Fig. 3A is prior to a drag-and-drop operation as *inter alia*, Fig. 3A does not show an enlarged icon. POR, 43-45. In fact, Dr. Bederson concedes that Hirayama-307's icon should "most likely" be enlarged once the pen moves outside the hatched region. Ex. 1051 [Bederson-Reply-Decl.] 44-45, n. 2. And even if Fig. 3B (contrary to Hirayama-307's text) shows icon 41 present in its original position during the drag-and-drop, that at most shows that the icon was duplicated (not relocated), which still does not disclose the claims that require neither relocation nor duplication. POR, 45, n.8.

B. Petitioner Fails To Present Any Proper Motivation To Modify Hirayama-307 So As Not To Duplicate Or Relocate The Icon.

As explained (POR, 46-50), the Petition failed to present any motivation to modify Hirayama-307 (in Petition's single-reference obviousness ground) so that icon-41 is not relocated or duplicated. Petitioner responses are incorrect and untimely.

Petitioner argues that Hirayama-307's icons are not relocated or duplicated during the drag because "[i]f the window 43 is displayed when the pen leaves the hatched area, there would be no reason to drag the icon downward with the pen for the few millimeters between where the pen touches the icon and the pen leaves the

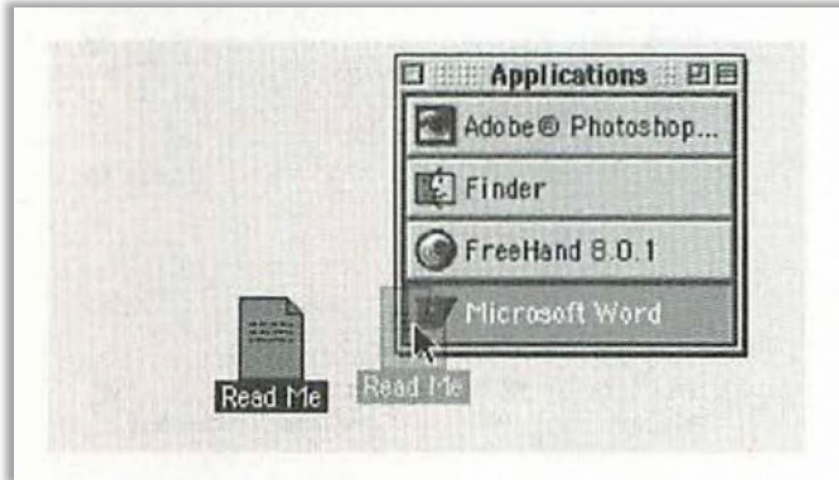
hatched area.” Reply, 21. This is contrary to Hirayama-307, which confirms the icon moves with the pen prior to being “enlarged” into a window. *See, e.g.*, Ex. 1006 [Hirayama-307] 2:5-8. Petitioner’s conclusory assertion that there is “no reason” for Hirayama-307 to do this does not provide a motivation to modify Hirayama-307. Furthermore, Dr. Rosenberg explained the importance of providing feedback so the user knows the drag-and-drop operation is being performed as the user moves the pen. Ex. 2007 [Rosenberg-2nd-Decl.] ¶¶83-85. Petitioner does not explain why it is beneficial to modify Hirayama-307 in a way that likely frustrates the user by not providing feedback during the first few seconds of the operation. *See also* Ex. 1051 [Bederson-2nd-Decl.] ¶110 (Sony Palm-Pilot provided feedback from the beginning of the movement).

Petitioner next argues that Hirayama-307 can be modified to not relocate or duplicate its icon during a drag-and-drop because “[t]here were numerous known ways to provide the user feedback that they have touched down on the desired icon.” Reply, 22. Notably, Petitioner originally contended that Hirayama-307 already provided sufficient feedback even without relocating or duplicating its icons during the movement of the pen by virtue of showing the location of the pen on the screen with a cursor. Pet., 60-61. As explained (POR, 48-50), however, the cursor only provides feedback regarding the location and movement of the pen, not whether the drag-and-drop operation is being successfully performed.

Apparently conceding the point, the Reply now presents possible further modifications of Hirayama-307 to provide feedback during the drag-and-drop operation, by, for example, changing icon-41's color. Reply, 23-25. These new further modifications of Hirayama-307 are untimely. Moreover, that there may have been various alternatives to implementing Hirayama-307 does not provide a motivation as to why a POSITA would have modified Hirayama-307's express disclosures of moving/relocating the icon with the movement of the pen in favor of a different implementation.

Finally, the Reply argues for the first time that "a POSA would have been motivated to not visually drag the icon with the pen because doing so was computationally expensive at the time." Reply, 25. This argument is untimely and unsupported. Petitioner may not present a new motivation in reply. *Wasica Fin. GmbH v. Cont'l Auto. Sys., Inc.*, 853 F.3d 1272, 1286 (Fed. Cir. 2017); *Dish Network L.L.C. v. Sound View Innovations LLC*, IPR2020-01276, Paper 40, 33 (PTAB Feb. 8, 2022). Moreover, there is no support for Petitioner's claim that it was too computationally expensive to provide visual feedback as disclosed in Hirayama-307. Petitioner's expert highlights the importance of relying on an operating system that is "representative of the 2002 time frame" (Ex. 1051 [Bederson-Reply-Decl.] ¶112), but relies on ancient Mac OS 7 and 8 systems from 1984-1997. Tellingly, Dr. Bederson reluctantly admitted Mac OS 9 was released

in 2000 and duplicated a dragged icon—without any hint of “computational” challenges. Ex. 2044 [Bederson-2nd-Depo.] 8:9-24; 9:8-25; 10:2-19; 10:25-11:3; 11:12-22; 15:5-15; 16:22-17:23.



C. Petitioners Fail To Provide Any Motivation To Modify Hirayama-307 In View Of Ren.

As explained (POR, 51-61), and as the Board found (ID, 20), Petitioner failed to provide any motivation to modify Hirayama-307 in view of Ren to activate Hirayama-307’s icons through Ren’s Slide-Off selection method. Petitioner does not suggest this modification would address any deficiency in or improve upon Hirayama-307. Reply, 26-27.

Petitioner argues a POSITA “would have looked for the gesture most consistent with Hirayama-307’s disclosure and goal of designating the position where the window 43 would be opened.” Reply, 27. This new motivation is untimely and Petitioner still does not explain *why* a POSITA would abandon

Hirayama-307's system in favor of Ren's selection techniques. Moreover, Ren discloses *selection* techniques, not techniques to drag an icon and drop it at a desired location. Ex. 1004 [Ren] 1 (discussing "pen-based *selection* strategies").

Similarly, the Reply, 27 is incorrect that "[a] POSA would not have chosen Slide-Touch because activation occurs when the pen contacts the target after gliding of the pen, and is therefore inconsistent with the Hirayama-307 gesture." Ren simply discloses the preferred *selection* technique, which it discloses to be a Slide-Touch, not Petitioner's Slide-Off. POR, 51-61. Furthermore, even if there were a motivation to combine, the POSITA would have Hirayama-307's icon selected through Slide-Touch $a \rightarrow b \rightarrow c$, and then, starting with point c where the pen is on the icon, dragged to the desired location on the screen.

IV. PETITIONER'S CLAIM 6 ARGUMENTS ARE UNTIMELY.

While the Petition relied on Allard's tool function, that function did not disclose "*a* list of available *files*," but only available *applications*. POR, 62. Petitioner responds that once the user chooses the FAX application and goes to the FAX screen 130, Allard discloses a list of "different fax files." Reply, 28 (*citing* Ex. 1010 [Allard] 6:17-18.) However, a separate list for available files in a specific application does not disclose "*a*" list with *both* available "applications and files."

Petitioner also fails to provide a motivation to combine Hirayama-307 and Allard. Hirayama-307 identifies its available applications on its menu bar. POR, 62. Petitioner now alleges that “a POSA would have appreciated the importance to retain fewer icons, such as for commonly used applications, rather than populating the icon group with icons for all applications.” Reply, 28. This untimely and unsubstantiated motivation should be disregarded. We are not told how many applications would be included in Hirayama-307, or why it would be preferable to open a list as opposed to accessing applications from the menu bar. Ex. 2044 [Bederson-2nd-Depo.] 28:4-12.

V. PETITIONER FAILS TO SHOW DISCLOSURE OF CLAIM 15.

The POR, 64-65, supported by technical dictionary definitions, explained a shell is “a software interface between the user and the operating system” which “interprets commands and communicates them to the operating system of the computer.” Petitioner does not challenge this definition but alleges that Hirayama-307’s dialer is a shell because it is a “function[] that communicate[s] *through an interface* to the operating system of the device.” Reply, 28. The Reply misapprehends the meaning of shell. A shell *is* the software interface. Even if Hirayama-307’s dialer communicated with the operating system *through* some interface, the dialer application is not itself the software interface and, therefore, is not a shell.

Petitioner also repeats its conclusory assertion that “it would have been obvious to implement Hirayama-307 as a ‘shell.’” Reply, 29. But Petitioner does not present any analysis or reason as to why a POSITA would have implemented Hirayama-307’s as a shell, at the expense of consuming more memory and CPU, and requiring more coding. POR, 66.

VI. IMPROPERLY INCORPORATED PORTIONS OF DR. BEDERSON’S REPLY DECLARATION SHOULD BE DISREGARDED.

Petitioner has submitted a *97-page reply declaration* in its attempt to fill the Petition’s numerous holes. At ~18,700 words, it is 3.3x the reply word count, making a mockery of the Board’s rules. Petitioner’s Reply improperly incorporates Dr. Bederson’s declaration with little if any meaningful discussion of the cited portions. Consequently, at least the following paragraphs should be disregarded because they are (i) not cited (Ex. 1051 [Bederson-Reply-Decl.] ¶47), (ii) not meaningfully discussed (¶¶38-42, 55-56, 58-59, 69, 71-74, 90-94, 100, 103, 108-110, 120, 130, 132-133), or (iii) are partially discussed and, thus, the unmentioned portions should not be considered (¶¶112, 119, 122).

VII. CONCLUSION

For the foregoing reasons, the claims should be confirmed.

Date: August 5, 2022

Respectfully submitted,

/ Kenneth J. Weatherwax /

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME LIMITS

This Sur-Reply (the “Sur-Reply”) consists of 5,577 words, excluding table of contents, table of authorities, certificate of service, this certificate, or table of exhibits. The Sur-Reply complies with the type-volume limitation of 5,600 words as mandated in 37 C.F.R. §42.24. In preparing this certificate, counsel has relied on the word count of the word-processing system used to prepare the paper (Microsoft Word).

Respectfully submitted,

/ Parham Hendifar /

Date: August 5, 2022

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the following documents were served by electronic service, by consent between the parties, on the date signed below:

PATENT OWNER'S SUR-REPLY EXHIBITS 2044 - 2045

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